

Claims

1 1. A method of making mutacin I protein comprising culturing a
2 microorganism transformed with DNA (SEQ ID No: 1) encoding for mutacin I
3 protein and recovering mutacin I protein.

1 2. A method according to claim 1, wherein said culturing step
2 comprises disposing the microorganisms on a membrane.

1 3. A method according to claim 2 wherein said culturing step
2 comprises contacting the membrane having the microorganism thereon with a
3 growth media.

1 4. A method according to claim 3, further comprising the step of
2 freezing the growth media having the microorganism thereon and then thawing
3 the growth media.

1 5. A method according to claim 4, further comprising the step of
2 separating a liquid fraction of the growth media from a solid fraction of the
3 growth media.

1 6. A method according to claim 5, wherein said recovery step
2 comprises the step of chromatographically separating the mutacin I from the
3 liquid fraction.

1 7. A process for the production of mutacin I having part or all of
2 the primary structural conformation and biological activity of bacterial mutacin
3 I, said process comprising: growing, under suitable conditions, prokaryotic or
4 eukaryotic host cells transformed or transfected with a DNA sequence
5 according to claim 1 in a manner allowing expression of said mutacin I
6 product; and isolating the mutacin I product of the expression of said DNA
7 sequence.

1 8. A mutacin I protein product of the expression in a prokaryotic or
2 eukaryotic host cell of DNA according to claim 7.

1 9. A method of treating or preventing an infection in a subject, said
2 method comprising administering to said subject an effective amount of a
3 purified and isolated peptide having the amino acid sequence as set forth in
4 SEQ ID No: 2, or a pharmaceutically acceptable salt, amide, ester, or prodrug
5 thereof.

1 10. A method according to claim 9, wherein the peptide is
2 administered orally.

1 11. A method according to claim 9, wherein the peptide is
2 administered topically.

1 12. A method according to claim 9, wherein the peptide is applied
2 to a surface of a medical device.

1 13. A method according to claim 12, wherein the medical device is
2 a catheter.

1 14. A method according to claim 12, further including the step of
2 coating the medical device with the peptide prior to contacting the subject
3 therewith.

1